Attorney's Docket No. 35718/235742 (5718-114)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:	Li *et al.*	Confirmation No.:	7724
Appl No.:	09/899,645	Group Art Unit:	1638
Filed:	July 5, 2001	Examiner:	Russell Kallis
For:	METHODS FOR REGULATING BETA-OXIDATION IN PLANTS		

May 27, 2003

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

This is in response to the Office Action dated March 26, 2003, in which the Examiner has required restriction between Group I, namely Claims 1-3, 5-14, 17, 21-22 and 24-30, Group II, namely Claims 1-3, 21-22 and 24-30, Group III, namely Claims 15-16, 18-20, 23 and 31-36, and Group IV, namely Claim 4. Applicant hereby provisionally elects with traverse to prosecute the claims of Group I (Claims 1-3, 5-14, 17, 21-22 and 24-30) and expressly reserves the right to file divisional applications or take such other appropriate measures deemed necessary to protect the inventions in the remaining claims.

The Examiner indicates that the Group I claims are drawn to a method for decreasing beta-oxidation in a transformed plant and plant cells thereof via antisense suppression and that the Group II claims are drawn to a method for increasing beta-oxidation in a transformed plant and plant cells thereof via overexpression of acyl-CoA thioesterase protein and plant cells thereof. While the Examiner has indicated that the inventions of Group I and Group II are unrelated, all of the Group II claims, namely claims 1-3, 21-22 and 24-30, are also Group I claims. The Examiner has indicated that claims 1-3, 21-22 and 24-30 will be examined to the extent that they read on the elected invention of either Group I or Group II.

Applicants respectfully disagree with the restriction requirement, particularly the restriction concerning Groups I and II, and kindly request that the Examiner reconsider and examine the inventions of Group I and II together for the reasons set forth below.

First, the subject matter of the claims that are common to both Group I and Group II

(claims 1-3, 21-22 and 24-30) is not limited to use in either a method of decreasing beta-oxidation by antisense supression or a method for increasing beta-oxidation by ovexpression of an acyl CoA thioesterase. Claims 1-3, 21-22 and 24-30 are drawn to compositions including isolated nucleotide molecules (claim 1), expression cassettes comprising at least one of said nucleotide molecules (claims 2-3), transformed plants comprising said nucleotide molecules stably incorported in their genomes (claims 21-22 and 24-29), and transformed plant cells comprising said nucleotide molecules stably incorported in their genomes (claim 30). Not one of claims 1-3, 21-22 and 24-30 includes a recitation that said nucleotide molecule, expression cassette, transfromed plant, or transformed plant cell is limited to use in a method for decreasing beta-oxidation via antisense suppression or a method for increasing beta-oxidation via overexpression of acyl-CoA thioesterase protein.

Claim 1, for example, reads as follows:

> 1. An isolated nucleotide molecule comprising a nucleotide sequence selected from the group consisting of:
> (a) the nucleotide sequence set forth in SEQ ID NO: 1;
> (b) a nucleotide sequence which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 2;
> (c) a nucleotide sequence comprising at least 75% identity to the nucleotide sequence set forth in SEQ ID NO: 1;
> (d) a nucleotide sequence encoding a polypeptide having acyl-CoA thioesterase activity, wherein said nucleotide sequence comprises at least 24 contiguous bases of the nucleotide sequence set forth in SEQ ID NO: 1; and
> (e) a nucleotide sequence complementary to the nucleotide sequence of (a), (b), or (c).

As with other claims common to Groups I and II, claim 1 does not include a recitiation that the isolated nucleotide molecules are limited to a partiuclar use, whether it be a method for decreasing or increasing beta-oxidation, or some other method.

The Office Action indicates that the methods of Group I and Group II "have different modes of operation, different funtions, and different effects and utilize different starting

materials." (pages 2-3). This statement is inaccurate with respect to claims 1-3, 21-22 and 24-30 because these claims, whether considered as part of Group I or Group II, make use of the same starting materials, the isolated nucleotide molecules of the invention, promoters, plants and/or plants cells.

Second, the Examiner is reminded that 37 CFR §1.142 requires that the inventions be "independent and distinct." According to MPEP 802.01, "independent" requires that there is no disclosed relationship between the two or more subjects disclosed. The relationship of Groups I and II does not meet this standard. Claims 1-3, 5-14, 17, 21-22 and 24-30 are drawn to the isolated nucleotide molecules of the invention as set forth in claim 1 and thus are not properly considered to be independent. Therefore, restriction of the subject matter of these claims between Groups I and II is improper because the Examiner has clearly failed to meet the "independent" prong of the "independent and distinct" requirement as discussed in MPEP 802.01.

Third, MPEP 803 sets forth that "[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." Applicants submit that the search required to examine Groups I and II together would not be a serious burden because all of these claims are drawn to the nucleotide molecules of the invention, whether these nucleotide molecules are used in antisense suppression or for overexpression. Accordingly, a search required to examine the Group II invention would produce the same result as the search required to examine the Group I claims. Accordingly, the examination of Groups I and II together would not constitute a serious burden on the Examiner, when compared to the examination of Group I alone.

For these reasons, Applicants kindly request that the Examiner reconsider and examine the inventions of Group I and Group II together. Should the Examiner have further questions or comments with respect to examination of this case, it is respectfully requested that the Examiner telephone the undersigned so that further examination of this application can be expedited.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those, which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to Examiner Russell Kallis at the US Patent and Trademark Office at Fax No. (703) 308-4242 on the date shown below.

Marilyn Muñoz — Date 5/27/03